

Wednesday, 9/26/2007 7:56:03 AM
Kim Johnson

Process Sheet

SPLIT

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	SAD L E BILLE T
Job Number :	34873-1	Part Number :	D610 003
Estimate Number :	10033	Drawing Number :	D610 REV A
P.O. Number :		Project Number :	N/A
This Issue :	9/26/2007 S.O. No. :	Drawing Revision :	A
Print Rev. :	NC	Material :	
First Issue :	1/1 Type : MACHINED PARTS	Due Date :	10/26/2007
Previous Run :	34844	Qty :	300 Ums Each
Written By :			
Checked & Approved By :	07/09/26		
Comment :	Est X 01.05.04 New Issue EC		

Additional Product

Number 

Seq # Machine Or Operation: Description :

10 P3 PURCHASING

Comment: PURCHASING

Issue P/O: 4653

a) Description: Aluminum billet

b) 7.875" x 6.250" x 2.00" thick

c) Tolerance on all dimensions are +0.030"/-0.000"

d) Grain direction along 7.875" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

07/09/24

300

20 D6101003P 7075-T7351 2X6.25X7.875

Comment: Qty.: 1.0000 Each(s)/Unit Total : 300.0000 Each(s)

7075-T7351 2X6.25X7.875

30 PACKAGING 1 PACKAGING RESOURCE #1

Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

AS 08/09/24 XSO

40 QC6 DIMENSIONAL CHECK

Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6101

mk 08/17/25

56

Date: Wednesday, 9/26/2007 7:56:03 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BIL .ET

Job Number: 34873

Part Number: D6101003

Job Number:



Seq. #:

Machine Or Operation:

Description:

50

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

mf 08/07/25

(50)

60

QC21

FINAL INSPECTION/W/O RELEASE



08/07/30

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



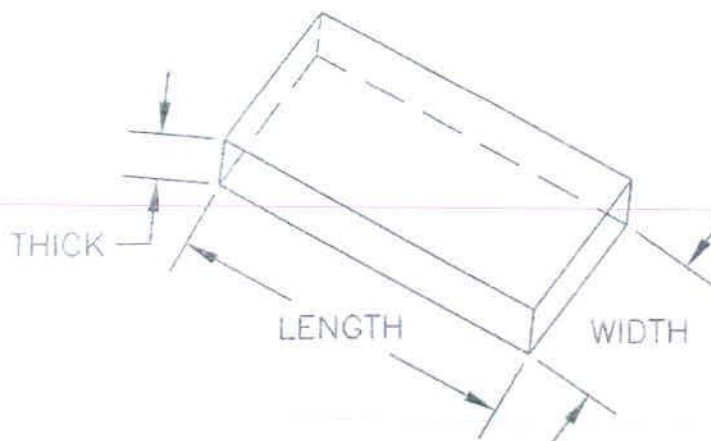
mf 08-07-25



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED AS	DRAWING NO. D6101	Rev. A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BULLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
31.04.23



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

SHOUL
RETURN
UNCONTROLLED COPY
SUBJECT TO ANY CHANGE
WITHOUT NOTICE
WORK ORDER
NO. 34873

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

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3. REQUISITION CLIENT-CUSTOMER REQUISITION NO.		NO. COM. CLIENT-CUST. ORD. NO.		COMPT-ACCT.	VEND.-SLS	TERR.	EXPEDIE PAR-SHIP VIA
		4405					FRAGILE - 112 Montreal
CHETEUR-PURCHASING AGENT		TELEPHONE	H/C	TAXE	NO. COM ORD	REGION LIVRAISON-DEL ZONE	F.A.B.-F.O.B.
LINDA LAFLE		418 382 3036	07	0	1	070	PREPAID
VRÉ A-SHIP TO:		VENDU A-SOLD TO:		INFORMATION CRÉDIT-CREDIT INFORMATION			ROUTE
		SANT AEROSPACE LTD 1778 ABERDEEN MONTREAL					01111 0-7 33-11 01-2
INSTRUCTIONS/LIVRAISON-DELIVERY		INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)		INSTRUCTIONS LIVRAISON (CONT.)-DELIVERY (CONT'D.)			
1101 117081							

DESCRIPTION - ITEM 1

2.00000 PLATE 7075 T7351 ALUM 6.25" X 7.875"

CERTIFICATE OF CONFORMANCE

A.M. Castle & Co. certifies that the material(s) supplied under this document will meet and conform to the specifications of the product(s) described hereon.

A.M. Castle & Co. (Canada) Inc.

WEIGHT FOR SHIPPING PURPOSES ONLY. SEE INVOICES FOR ACCURATE BILLING WEIGHT. PLEASE SIGN AND DATE DRIVER'S COPY FOR RECEIPT OF MATERIAL AND, IF CHECKED, TEST REPORTS.

INSTRUCTIONS

GRAIN TO RUN ALONG 6.25"
THICKNESS TO 7.875"
PRIOR TO SHIPMENT OF MATERIAL

COULÉE INFO-HEAT INFO QTE-QTY

42419AS RED (3)
425362AI Green (3)
433611AI Yellow (3)
434049AS Black (3)

INSTRUCTIONS (CONT'D.)

✓ 51 x 6.25 x 6.00

QTE/UNITE COM.-ORDERED 50 PCS PCS
POIDS COM.-WT. ORDERED 379

BALLOTS-BUNDLES 1
PCES/PO EXP. SHIP 51
POIDS EXP.-WT. SHIPPED 379

FORME-SHAPE I.A.C.
N-3

ENT-WF

DESCRIPTION - ITEM 2

2.00000 PLATE 7075 T7351 ALUM 6.25" X 7.875"

BLACK W/RED STRIPE

INSTRUCTIONS

GRAIN TO RUN ALONG 6.25"
THICKNESS TO 7.875"
PRIOR TO SHIPMENT OF MATERIAL

COULÉE INFO-HEAT INFO QTE-QTY

42419AS RED (3)
433611AI Yellow (3)
434049AS Black (3)

INSTRUCTIONS (CONT'D.)

27 x 6.25 x 7.875

QTE/UNITE COM.-ORDERED 50 PCS PCS
POIDS COM.-WT. ORDERED 498

BALLOTS-BUNDLES 1
PCES/PO EXP. SHIP 27
POIDS EXP.-WT. SHIPPED 498

FORME-SHAPE I.A.C.
N-3

ENT-WF

TERMS AND CONDITIONS OF SALE

SEE DISCLAIMERS AND LIMITATIONS ON THE REVERSE SIDE

DESCRIPTION - ITEM 3

ALL EXCEPTIONS FOR SHORTAGE OR DAMAGE MUST BE NOTED ON THE DRIVER COPY & CUSTOMER COPY OF THE DELIVERY RECEIPTS & SIGNED BY THE DRIVER & CUSTOMER. COPY OF SUCH RECEIPT PROPERLY NOTED MUST BE SUBMITTED WITHIN 10 DAYS WHEN CREDIT IS REQUESTED.

INSTRUCTIONS

2 BOXES
8/8/24

COULÉE INFO-HEAT INFO QTE-QTY

INSTRUCTIONS (CONT'D.)

QTE/UNITE COM.-ORDERED
BALLOTS-BUNDLES
PCES/PO EXP. SHIP
POIDS EXP.-WT. SHIPPED

FORME-SHAPE I.A.C.

ENT-WF

NOM (LETTRE MOULEE)-NAME (PRINT ONLY)

RECU PAR-RECEIVED BY

DATE RECU-
DATE RECEIVED

FEVILLE D'EMBALLAGE - PACKING SLIP

SHIP TO:
A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4128763

SOLD TO:
AM CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

CUSTOMER PO NUMBER: 01-47437		WORK PACKAGE:	CUSTOMER PART NUMBER: 6857 A97075-60		SHIP RUN/LOAD ID: 101277/19		GOV'T CONTRACT NUMBER:	
KAISER ORDER NO: 1066909		LINE ITEM: 1	SHIP DATE: 3-MAR-2008	ALLOY: 7075	CLAD: BARE	TEMPER: T7351	PRODUCT DESCRIPTION: MILL FINISH PLATE	
WEIGHT SHIPPED: 2896 LB		QUANTITY: 2 PCS EST.		B/L NUMBER: 2017654		GAUGE: 2.0000 IN		WIDTH: 48.500 IN LENGTH: 144.500 IN

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev07
BSS 7055/RevA
DPS 4.713/RevAH
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC MS1011/RevE
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 424191A5 Cast 159

Drop 97

Ingot 4

(ASTM E8/B557)

Tensile: Temper
T7351

Dir / # Tests
LT / 2 (Min:Max)

Ultimate KSI (MPA)
73.9 : 74.5
(510 : 514)

Yield KSI (MPA)
62.8 : 63.4
(433 : 437)

CASTLE METALS CORP.
DATE RCYD 5/7/08
IAC 6857
APPROVED BY J.

Elongation %
11.6 : 11.7

(ASTM E1004)

Conductivity %IACS :
(MS/M) :

41.3 Min
24.0 Min

41.4 Max
24.0 Max

(ASTM E1251)

Chemistry:
Actual

SI FE
0.09 0.19

CU MN
1.5 0.02

MG CR
2.4 0.19

ZN TI
5.8 0.03

V
0.01

ZR
0.02

OTHER
TOT 0.03

ALLOY LIMITS

Chemistry:
7075 MIN
MAX

SI FE
0.00 0.00
0.40 0.50

CU MN
1.2 0.00
2.0 0.30

MG CR
2.1 0.18
2.9 0.28

ZN TI
5.1 0.00
6.1 0.20

V
0.00
0.05

ZR
0.00
0.05

OTHER
EACH 0.05
TOT 0.15

Aluminum Remainder

KAISER ALUMINUM

CERTIFIED TEST REPORT

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

Serial Number
4128763

TEST NOTES

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND MANUFACTURED IN THE U.S.A , AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR



**KAISER
ALUMINUM**

Trentwood Works - Spokane, WA 99215

Phone: (800) 367-2586

Serial Number
4121440

Lot: 433611A1 Cast 151

Drop 04

Ingot 4

(ASTM B8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	74.0 : 74.1 (510 : 511)	63.4 : 63.6 (437 : 439)	11.7 : 12.1

(ASTM E1004)

Conductivity %IACS :	41.2 Min	41.2 Max
(MS/M) :	23.9 Min	23.9 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.08	0.16	1.5	0.01	2.5	0.20	5.8	0.02	0.01	0.01	TOT 0.04

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

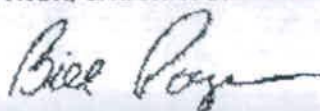
Aluminum Remainder

TEST NOTES

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND
MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS
INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD
GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL,
WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS
OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. 180-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR


SHIP TO: A M CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131	
SOLD TO: AM CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131	
CUSTOMER PO NUMBER: 01-47437	WORK PACKAGE:
CUSTOMER PART NUMBER: 6857 A97075-60	
KAISER ORDER NO: 1065809	LINE ITEM: 1
SHIP DATE: 4-MAY-2008	ALLOY: 7075
CLAD: BARE	TEMPER: T7351
PRODUCT DESCRIPTION: MILL FINISH PLATE	
WEIGHT SHIPPED: 5762 LB	QUANTITY: 4 PCS EST.
B/L NUMBER: 2017660	GAUGE: 2.0000 IN
WIDTH: 48.500 IN	LENGTH: 144.500 IN

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4128796

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev07
BSS 7055/RevA
DPS 4.713/RevAH
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP Q25/RevR
EAC MS1011/RevE
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 424049A5 Cast 159

Drop 97

Ingot 3

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	72.9 : 73.6 (503 : 507)	61.1 : 62.5 (421 : 431)	11.0 : 11.7

(ASTM E1004)

Conductivity %IACS :	41.3 Min	41.3 Max
(MS/M) :	24.0 Min	24.0 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.09	0.19	1.5	0.02	2.4	0.19	5.8	0.03	0.01	0.02	TOT 0.03

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

CASTLE METALS CORP.

DATE RCVD

IAC 6857

APPROVED BY

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215

Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4128796

TEST NOTES

Metal represented by this test report was immersion ultrasonically tested from one side and meets the Class A and Class B requirements of all specifications referenced on this test report.

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND MANUFACTURED IN THE U.S.A , AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR



SHIP TO: A M CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131	
SOLD TO: AM CASTLE & CO 3400 NO. WOLF ROAD FRANKLIN PARK, IL 60131	
CUSTOMER PO NUMBER: 01-47437	WORK PACKAGE: CUSTOMER PART NUMBER: 6857 A97075-60
KAISER ORDER NO: 1066809	LINE ITEM: 1
SHIP DATE: 4-MAY-2008	ALLOY: 7075
CLAD: BARE	TEMPER: T7351
PRODUCT DESCRIPTION: MILL FINISH PLATE	
WEIGHT SHIPPED: 5752 LB	QUANTITY: 4 PCS EST.
B/L NUMBER: 2017660	GAUGE: 2.0000 IN
WIDTH: 48.500 IN	LENGTH: 144.500 IN

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4128796

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev07
ESS 7055/RevA
DPS 4.713/RevAH
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC MS1011/RevE
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 424049A5 Cast 159

Drop 97

Ingot 3

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	72.9 : 73.8 (503 : 507)	61.1 : 62.5 (421 : 431)	11.0 : 11.7

(ASTM E1004)

Conductivity %IACS :	41.3 Min	41.3 Max
(MS/M) :	24.0 Min	24.0 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.09	0.19	1.5	0.02	2.4	0.19	5.8	0.03	0.01	0.02	TOT 0.03

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

CASTLE METALS CORP.

DATE RCVD 5/9/08

IAC 6857

APPROVED BY *

